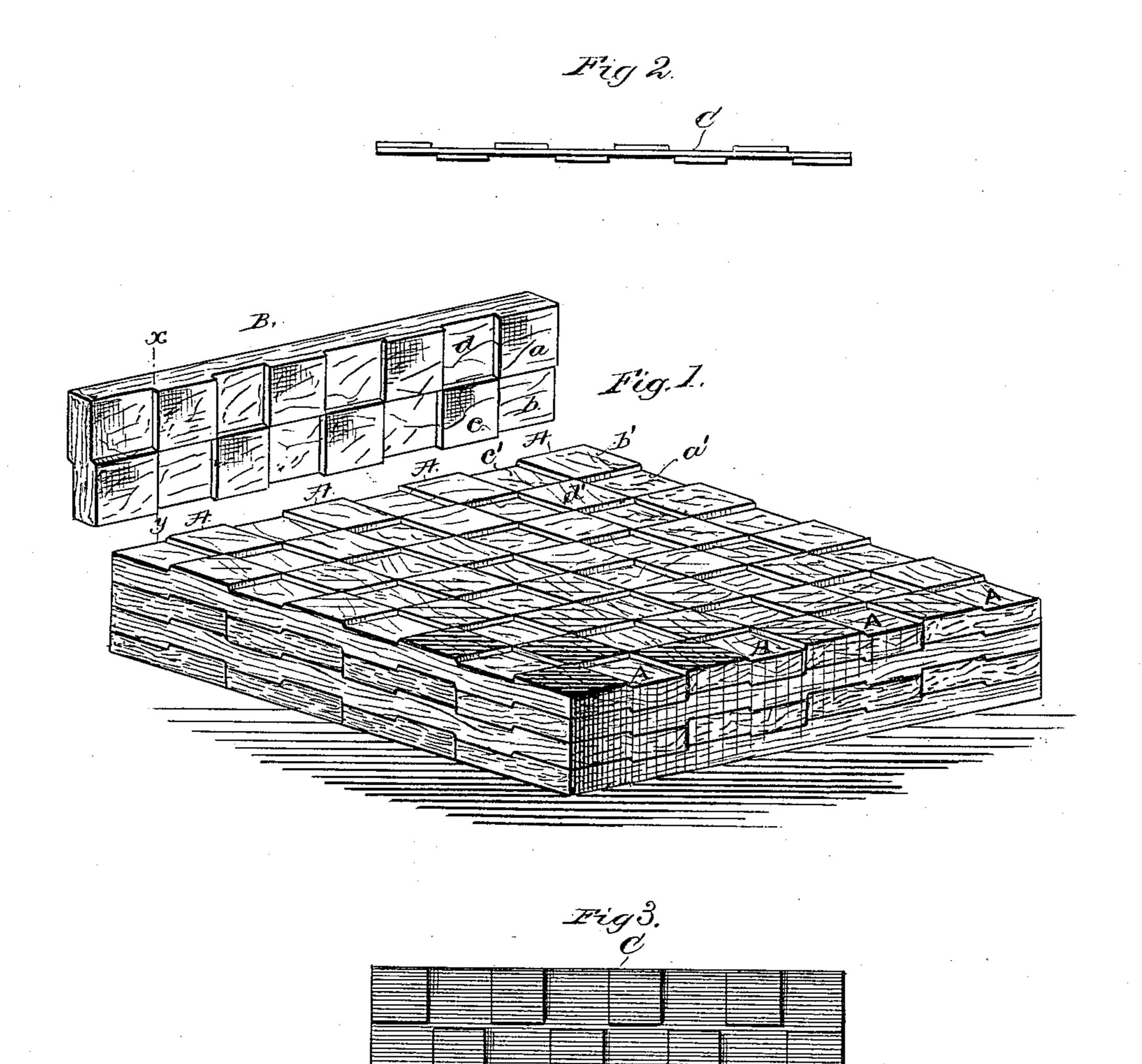
(No Model.)

P. H. DUKE.
Plug Tobacco.

No. 231,022.

Patented Aug. 10, 1880.



WITNESSES: Thu F.C. Premkert Sdw. W. Byrn.

INVENTOR:
Duke

ATTORNEYS.

## United States Patent Office.

PATRICK H. DUKE, OF RICHMOND, VIRGINIA, ASSIGNOR TO THOMAS C. WILLIAMS, OF SAME PLACE.

## PLUG-TOBACCO.

SPECIFICATION forming part of Letters Patent No. 231,022, dated August 10, 1880.

Application filed May 25, 1880. (No model.)

To all whom it may concern:

Be it known that I, PATRICK H. DUKE, of Richmond, in the county of Henrico and State of Virginia, have invented a new and useful 5 Improvement in Plug-Tobacco; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is an isometric view of a series of cross-piled plugs forming the bulk as contained in the caddies. Figs. 2 and 3 are respectively an edge and face view of the plates interposed between the plugs to give them the shape de-15 scribed.

In the manufacture of plug-tobacco various means for applying a trade-mark to the plug and for spacing the plug into aliquot parts to facilitate the retail of the same have been here-20 tofore employed. That method most generally approved is to impress the distinguishing marks into the body of the plug during the process of manufacture. Incident to the employment of these plans, however, are certain objections, 25 prominent among which is the incompatibility of a transverse spacing-mark with the cross-piling of the layers in the caddies, the said marks or indentations forming air-channels through the tobacco which give lodging-30 place to mold.

My invention does not contemplate the employment of letters on the plug, but relates more particularly to the use of spacing-marks; and its object is to secure the division of the 35 plug into aliquot parts, which effect the spacing of the tobacco in such a manner that the plugs, when cross-piled, fit together to make an absolutely compact and solid mass in the caddy, without any of the air-channels before re-

40 ferred to.

To this end the improvement consists in impressing the faces of each plug with a set of checker - board squares, one set of which is raised, or in relief, and the alternate set sunken, 45 by which arrangement the spacing of the plug into aliquot parts is effected, and the layers, when fitted in the caddies in cross-piles, fit solidly together, with the raised squares of one plug resting in the sunken squares of the plugs 50 atright angles in the next layer, and vice versa.

In the drawings, AAAA represent four plugs of tobacco juxtaposed so as to form one layer of plugs in the caddy. Each one of these plugs, it will be seen, is formed with a surface of perfect squares whose sides, as shown, are equal 55 to half the transverse dimensions of the plug. One set of these squares is raised, or in relief, while the alternate set is sunken, and the line x y constitutes the spacing line for the knife in cutting off an equal quantity each time. 60

B represents the first plug of the next layer, which is to be placed on the first layer at right angles. This plug B is shown near its position, and when turned over and placed in position on the first layer its raised square a fits 65 into the sunken square a', its sunken square bfits over the raised square b', its raised square c fits into the sunken square c', its sunken square d fits over the raised square d', and so on throughout the plug. It will therefore be seen 70 that the layers, when crossed, fit compactly together, making a perfectly solid mass in the caddy, without any air-channels or crevices and without any liability to mold by reason of the latter. This arrangement, it will be seen, 75 not only effects the spacing of the plug into transverse parts, but also gives a line for further subdivision. Thus, if the plug weighs a pound, and sixteen squares are formed therein, as shown, the line of cross-section will cut off two 80 squares constituting two ounces, and each of these pieces is marked for further subdivision into ounce pieces.

The merit of my invention, or that which gives value to it, is the form of the perfect 85 squares, whose symmetrical sides find a perfect coincidence whether laid longitudinally or atrightangles, and which fit compactly against the sides of the caddy.

It is not necessary that two rows of the 90 squares should be used, as shown, for in making narrower plugs, or plugs of the same width but thinner, the sides of the squares may be equal to the width of the plug. The alternate recurrence of the raised and sunken squares, 95 however, is a necessity.

The mode of giving to the plugs the surface described is similar to that heretofore used for marking tobacco with indentations—i. e., the lumps are packed with alternate plates C, 100 having corresponding die-faces and pressure

applied.

For the two outside layers the plugs are impressed only on one side, so as to make the 5 outer faces of the bulk fit closely in the caddy without air-spaces. The plugs throughout the body of the caddy, however, have both faces

pressed into the squares.

In defining my invention more clearly with ro respect to the prior state of the art, I would state that I am aware that it is not new to pack plugs of tobacco in cross-layers, so that a raised device on one set of plugs entered a corresponding impression in the set of plugs form-15 ing the next layer. This arrangement, however, was not adapted for and had no relation to the spacing of the plug into aliquot parts.

I am aware, also, on the other hand, that a plug of tobacco has been impressed with al-20 ternate panels and indentations, which to a certain extent effected the spacing; but no construction or form of panel has ever been sug-

gested as would permit of the cross-piling of the layers so as to leave no air-spaces either in the body of the caddy or at the edges, as in 25 my case.

Having thus described my invention, what

I claim as new is—

A package of plug-tobacco having the faces of its plugs formed into perfect squares, one 30 set of which is raised and the alternate set depressed, with the raised and sunken faces of one layer or set of plugs fitting into and over the sunken and raised faces of the crossed piled plugs forming the next layer, substan- 35 tially as described, and for the purpose herein set forth.

The above specification of my invention signed by me this 17th day of May, 1880.

PATRICK HENRY DUKE.

Witnesses: EDWD. W. BYRN, SOLON C. KEMON.